FACT SHEET

DRAFT HWMA/RCRA PARTIAL-CLOSURE PLAN FOR THE FLUORINEL DISSOLUTION PROCESS MAKEUP AND HEATING AND COOLING SYSTEMS AT THE IDAHO NUCLEAR TECHNOLOGY AND ENGINEERING CENTER LOCATED AT THE IDAHO NATIONAL LABORATORY EPA ID NO. ID4890008952

This fact sheet sets forth the principal facts pertaining to a draft closure plan that the Idaho Department of Environmental Quality (DEQ) is proposing to approve. The closure plan presents the applicable closure requirements the DEQ intends to require of the United States Department of Energy (DOE) associated with the Fluorinel Dissolution Process (FDP) Makeup and Cooling and Heating Systems at the Idaho National Laboratory.

A. PURPOSE OF THE CLOSURE PLAN

Closure plans designate specific administrative and procedural requirements the owner/operator must meet in order to comply with Idaho's Hazardous Waste Management Act (HWMA) of 1983, as amended. DEQ reviewed, and now proposes to approve, the draft plan to close these FDP Systems.

B. PROCEDURES FOR REACHING A FINAL DECISION

IDAPA 58.01.05.009[40 CFR § 265.112(d)(4)] requires that the public be given thirty (30) calendar days to comment on the draft closure plan presented for approval under the HWMA. The comment period will begin June 20, 2007, and will end on July 20, 2007. Any person interested in commenting on this plan must do so within this thirty (30) calendar day comment period.

At the discretion of the Director of the DEQ, a public hearing may be provided if signed, written requests for a hearing are submitted personally, or sent to the address below and received on or before July 20, 2007. All persons wishing to comment on the partial-closure plan's conditions should submit comments in writing to:

Robert Bullock
c/o Jennifer Shafer
DEQ Waste Management & Remediation Division
1410 N. Hilton
Boise, ID 83706
Phone: (208) 373-0502

Comments should include all reasonable available references, factual grounds, and supporting material.

When making the final determination regarding the approval of this partial-closure plan, DEQ will consider all written comments received during the public comment period; comments received during the public hearing (if held); the requirements of the hazardous waste regulations of IDAPA 58.01.05.000 et. seq., and all other applicable federal, state or local laws.

C. FACILITY/UNIT DESCRIPTION

The FDP is located within Building CPP-666 at the Idaho Nuclear Technology and Engineering Center (INTEC) on the Idaho National Laboratory. The FDP was utilized for the dissolution of spent zirconium-based nuclear fuels and preparation of the dissolved product solution for further processing in Building CPP-601. This partial closure plan addresses the following systems within the FDP:

- Hydrofluoric Acid Makeup System
- Cadmium Sulfate Makeup System
- Zirconyl Nitrate Makeup System
- FDP Cooling and Heating System.

The Hydrofluoric (actually fluoroboric) Acid, Cadmium Sulfate and Zirconyl Nitrate Makeup Systems each consist only of contaminated piping that linked the fluorinel process to the waste lines. The FDP Cooling and Heating System used nuclear poisoned water to control the FDP temperature. The Cooling and Heating System consists of tanks, pumps, and extensive piping that currently contains approximately 2500 gallons of cadmium contaminated borated water.

D. CLOSURE ACTIVITIES

Closure activities consist of a phased removal and decontamination of the above systems. The Hydrofluoric Makeup System piping will be first with all piping except wall penetrations removed and the wall penetrations decontaminated (clean closed). Second to be removed will be the Cadmium Sulfate Makeup System closed in the same manner as the Hydrofluoric Acid Makeup System. The Zirconyl Nitrate System will be removed except for wall penetrations and one run of pipe that will be decontaminated. The Cooling and Heating System will be drained, Tanks VES-FM-101 and VES-FM-104 will be decontaminated and left in place, piping external to the FDP cell will be removed. Wall penetrations and piping internal to the FDP cell will be decontaminated. The closure also includes verification of piping and tank integrity, as appropriate, and action levels for piping that will remain in place. All activities associated with this plan will be monitored and certified by an independent registered professional engineer. Due to the radiation fields associated with the FDP the facility has requested an extended timeframe for closure of these units. The current Closure Schedule calls for closure activities to be completed within 1060 days of DEQ approval of the closure plan. The schedule includes a provision that if work proceeds ahead of pace the schedule may be compressed.

E. CLOSURE PLAN ORGANIZATION

The closure plan is divided into eleven sections and one appendix as follows:

SECTION	TITLE
1	INTRODUCTION
2	FACILITY DESCRIPTION
3	CURRENT AND MAXIMUM HAZARDOUS WASTE INVENTORY AND CHARACTERISTICS
4	CLOSURE PERFORMANCE STANDARD
5	CLOSURE ACTIVITIES
6	CLOSURE SCHEDULE
7	CLOSURE PLAN AMENDMENTS
8	CERTIFICATION OF CLOSURE
9	COST AND LIABILITY REQUIREMENTS
10	REFERENCES

APPENDIX	TOPIC
A	Waste Piping to be Removed or Decontaminated Sampling
ATTACHMENT	Analysis Plan for Closure